Real-Time PCR Gene Expression and Microarray transcriptome analysis training course

Obtain more in depth understanding of qPCR and microarray expression experiments

This analysis training workshop focuses on the real-time PCR (qPCR) and microarray gene expression analysis procedure including critical steps of qPCR gene expression workflow as well as primary and secondary microarray gene expression analysis. Learn about important considerations while planning gene expression studies. How to use qPCR for validation of microarrays as well as how to generate mRNA-miRNA interaction networks. Gain more knowledge about how to assess data quality, identify differentially expressed genes and alternative splicing events. We will be concentrating on efficient data analysis and use cost-free tools like Thermo Fisher Connect software (compatible with all Applied Biosystems™ real-time PCR systems) and Transcriptome Analysis Console (TAC) software to demonstrate essential analysis steps leading to final results.

Course participants will receive an insight into the appropriate experimental setup, quality assessment and analysis of gene expression results using cost-free Thermo Fisher Connect™ and Transcriptome Analysis Console (TAC) software.

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services and support

Course content:

Our training team consisting of highly qualified staff members, who have well-founded experience in professional support for qPCR and microarrays, will employ a combination of theoretical discussion and software demonstrations to cover the following topics:

Microarray data analysis:

• Introduction to microarrays
• Microarrays or RNA-Sequencing
• Gene expression software features for microarray quality control
• Gene level analysis using Transcriptome Analysis Console (TAC) Software for significant gene expression results
• mRNA-miRNA interaction networks
• Alternative splicing analysis

qPCR data analysis:

• Introduction to qPCR
• gene expression workflow, up to result calculations, according to MIQE guidelines

• Different normalisation strategies
• Pre-amplification option – increase cDNA amount to multiply qPCR reactions
• Data analysis with Thermo Fisher Connect Software for significant gene expression results
• Gene expression software features for quality control and display of final results (e.g. box plots, p-value, volcano plot)

Who should attend?

The course is intended for existing users and potential new users of qPCR and microarrays for gene expression who want to obtain more in depth understanding on the gene expression analysis workflow for coding and non-coding RNA.

Each participant is required to pay a course fee of €208; or SFr' 275. This amount may be redeemed against everyday qPCR and MicroArray products after the training.*

Date:

Time:

For additional details, please contact:

Course language:

Venue:

To register for one of the limited training places, please visit:
https://learn.thermofisher.com/europe/courses/view/id/382

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